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10/628,565	07/29/2003	Karsten Schulz	13909-026001 / 2002P00222	4843

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EXAMINER	
KARDOS, NEIL R	
ART UNIT	PAPER NUMBER
4172	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/628,565	SCHULZ ET AL.	
	Examiner	Art Unit	
	Neil R. Kardos	4172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/18/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This is a non-final first Office action on the merits. Currently, claims 1-37 are pending.

Claim Objections

Claim 4 is objected to because of the following informalities: Claim 4 refers to "the first virtual task" and "the second virtual task" of claim 1. There is insufficient antecedent basis for these limitations in this claim. However, examiner believes applicant meant to refer back to claim 3, which contains the proper antecedent basis to support these limitations in claim 4. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-5, 9-12, 15-16, 18-20, 24-27, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent number 5,630,069 to Flores et al ("Flores").

As per claims 1 and 16, Flores discloses a workflow model and method comprising:

a first workflow associated with a first party (see figure 2; column 7, line 60 through column 8, line 5, disclosing different roles for each workflow);

a first workflow view representing an abstraction of the first workflow (see column 7, lines 19-22, disclosing viewing a workflow map on a computer screen);

a second workflow associated with a second party (see figure 2; column 7, line 60 through column 8, line 5, disclosing different roles for each workflow);

a second workflow view representing an abstraction of the second workflow (see column 7, lines 19-22, disclosing viewing a workflow map on a computer screen);

a coalition workflow view referencing the first workflow view and the second workflow view to provide a collaborative workflow, the collaborative workflow specifying tasks that the first party and the second party are required to perform (see figure 2; column 7, lines 46-56; column 8, lines 41-44, disclosing linking workflows).

As per claims 3 and 18, Flores discloses wherein the first workflow view comprises a first virtual task and a second virtual task corresponding to a first actual task and a second actual task, respectively, of the first workflow (see column 7, lines 19-22, disclosing viewing virtual workflow maps on a computer screen).

As per claims 4 and 19, Flores discloses wherein the first virtual task corresponds to a first plurality of actual tasks of the first workflow, and the second virtual task corresponds to a second plurality of tasks of the second workflow (see column 8, lines 25-35, disclosing a workflow that represents a collection of workflows rather than a single workflow).

As per claims 5 and 20, Flores discloses a first set of dependencies between the first virtual task and the first plurality of actual tasks, and a second set of dependencies between the second virtual task and the second plurality of actual tasks, wherein the first and second set of dependencies are selected so as to maintain an order of operation of the first plurality of actual

tasks relative to the second plurality of actual tasks (see table 1; column 8, line 45 through column 10, line 33, disclosing triggering an action based on a workflow condition).

As per claims 9 and 24, Flores discloses wherein the second workflow view comprises a third virtual task and a fourth virtual task corresponding to a third actual task and a fourth actual task, respectively, of the second workflow (see column 7, lines 19-22, disclosing viewing virtual workflow maps on a computer screen).

As per claims 10 and 25, Flores discloses wherein the tasks within the coalition workflow comprise the first virtual task, the second virtual task, the third virtual task, and the fourth virtual task (see column 8, lines 25-35, disclosing a business process workflow that consists of a collection of linked workflows).

As per claims 11 and 26, Flores discloses wherein the tasks within the collaborative workflow further comprise a synchronizing task operable to preserve an order of execution of the first virtual task, the second virtual task, the third virtual task, and the fourth virtual task (see table 1; column 8, line 45 through column 10, line 33, disclosing triggering an action based on a workflow condition).

As per claims 12 and 27, Flores discloses wherein the synchronizing task relates a finished execution state of the second virtual task to a beginning execution state of the third virtual task (see table 1; column 8, line 45 through column 10, line 33, disclosing triggering an action based on a workflow condition).

As per claims 15 and 30, Flores discloses a third workflow view corresponding to a second abstraction of the first workflow and constructed for forming a second coalition workflow view referencing the third workflow view and a third workflow associated with a third

party, to thereby provide a second collaborative workflow associated with the first party and the third party (see figure 2; column 7, line 60 through column 8, line 5, disclosing different roles for each workflow; column 7, lines 19-22, disclosing viewing a workflow map on a computer screen; column 7, lines 46-56 and column 8, lines 41-44, disclosing linking workflows).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flores in view of U.S. Patent number 7,184,966 to Parsonnet et al ("Parsonnet").

As per claims 2 and 17, Flores does not explicitly disclose wherein the first workflow and the second workflow are private to the first and second parties, respectively.

Parsonnet teaches these limiations (see figure 2, items 216-217, 236, 237; column 8, lines 27-50, disclosing separate workflows for a customer and a vendor protected by a firewall).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Parsonnet with the invention of Flores. One of ordinary skill in the art would have been motivated to do so in order to keep information private.

Claims 6-8, 13-14, 21-23, 28-29, and 31-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flores in view of U.S. Patent number 5,826,020 to Randell ("Randell").

As per claims 6 and 21, Flores does not explicitly disclose wherein a first virtual execution state of the first virtual task corresponds to a first actual execution state of the first plurality of actual tasks.

Randell teaches these limitations (see figure 10, items 1010-1012; figure 12; column 12, lines 35-44; column 13, line 40 through column 14, line 2, disclosing executing the virtual workflow task once the actual task has been executed).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Randell with the workflow model of Flores. One of ordinary skill in the art would have been motivated to do so in order to dispatch a task to an agent in order to perform work (see Randell, column 12, lines 35-38).

As per claims 7 and 22, Flores does not explicitly disclose wherein an actual state transition of the first actual execution state is reflected in a virtual state transition of the first virtual execution state.

Randell teaches these limitations (see figure 10, items 1010-1012; figure 12; column 12, lines 35-44; column 13, line 40 through column 14, line 2, disclosing executing the virtual workflow task once the actual task has been executed).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Randell with the workflow model of Flores. One of ordinary skill in the art would have been motivated to do so in order to dispatch a task to an agent in order to perform work (see Randell, column 12, lines 35-38).

As per claims 8 and 23, Flores does not explicitly disclose wherein a message from the second party concerning the first virtual task is forwarded to an active task within the first plurality of actual tasks via the first virtual task, based on the first actual execution state.

Randell teaches these limitations (see figure 10, items 1010-1012; figure 12; column 12, lines 35-44; column 13, line 40 through column 14, line 2, disclosing sending an information packet to an agent assigned to perform a task upon completion of a previous task).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Randell with the workflow model of Flores. One of ordinary skill in the art would have been motivated to do so in order to dispatch a task to an agent in order to perform work (see Randell, column 12, lines 35-38).

As per claims 13 and 28, Flores does not explicitly disclose wherein the collaborative workflow is implemented by communications between the first party and the second party regarding the first workflow view and the second workflow view.

Randell teaches these limitations (see figure 10, items 1010-1012; figure 12; column 12, lines 35-44; column 13, line 40 through column 14, line 2, teaching sending an information packet to an agent after another agent has completed a task; column 4, lines 13-27, disclosing different agents responsible for different tasks/workflows; see also column 2, lines 1-5, disclosing sending information between agents via e-mail).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Randell with the workflow model of Flores. One of ordinary skill in the art would have been motivated to do so in order to dispatch a task to an agent in order to perform work (see Randell, column 12, lines 35-38).

As per claims 14 and 29, Flores does not explicitly disclose wherein the collaborative workflow is implemented by a third-party mediator facilitating communications between the first party and the second party.

Randell teaches these limitations (see figure 10, items 1010-1012; figure 12; column 12, lines 35-44; column 13, line 40 through column 14, line 2, teaching sending an information packet to an agent after another agent has completed a task, wherein the computer system is the third-party mediator; column 4, lines 13-27, disclosing different agents responsible for different tasks/workflows).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Randell with the workflow model of Flores. One of ordinary skill in the art would have been motivated to do so in order to dispatch a task to an agent in order to perform work (see Randell, column 12, lines 35-38).

As per claim 31, Flores discloses a system comprising:

a first workflow modeler operable to model a first workflow associated with a first party (see column 7, line 9 through column 14, line 31, disclosing a workflow modeler);

a first view modeler operable to model a first virtual workflow as an abstraction of the first workflow (see column 7, line 9 through column 14, line 31, disclosing a workflow modeler; see column 7, lines 19-22, disclosing viewing an editable workflow map on a computer screen); and

Flores does not explicitly disclose a workflow engine operable to execute the first workflow and to virtually execute the first virtual workflow in conjunction with a second workflow associated with a second party.

Randell teaches this limitation (see figure 10, teaching the workflow engine).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Randell in the workflow modeler of Flores. One of ordinary skill in the art would have been motivated to do so in order to automate procedures that must be carried out according to defined rules among participants (see Randell, column 3, lines 57-59).

As per claim 32, Flores discloses wherein the second virtual workflow is an abstraction of the second workflow (see column 7, lines 40-46).

Flores does not explicitly disclose wherein the workflow engine is operable to execute the first virtual workflow in conjunction with a second virtual workflow.

Randell teaches this limitation (see figure 10, teaching the workflow engine; see column 4, lines 13-27, disclosing different agents responsible for different tasks/workflows; see column 7, lines 41-46, disclosing representing workflows as abstractions).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Randell with the workflow modeler of Flores. One of ordinary skill in the art would have been motivated to do so in order to automate procedures that must be carried out according to defined rules among participants (see Randell, column 3, lines 57-59).

As per claim 33, Flores discloses wherein the first virtual workflow comprises a first virtual task associated with a first task and a second task of the first workflow (see column 8, lines 25-35, disclosing a workflow that represents a collection of workflows rather than a single workflow).

Flores does not disclose wherein the workflow engine is operable to associate a virtual execution state of the first virtual task with a first execution state of the first task and a second execution state of the second task.

Randell teaches this limitation (see figure 10, items 1010-1012; figure 12; column 12, lines 35-44; column 13, line 40 through column 14, line 2, disclosing executing the virtual workflow task once the actual task has been executed).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Randell with the workflow model of Flores. One of ordinary skill in the art would have been motivated to do so in order to dispatch a task to an agent in order to perform work (see Randell, column 12, lines 35-38).

As per claim 34, Flores discloses a monitor operable to track the virtual execution state, the first execution state, and the second execution state (see column 8, line 45 through column 10, line 33; table 1, disclosing tracking the state of a task).

As per claim 35, Flores discloses a database for storing the first workflow, instances of the first workflow, the first virtual workflow, and instances of the first virtual workflow (see column 4, lines 53-64).

As per claim 36, Flores does not explicitly disclose a gateway operable to route messages to and from the second party and the workflow engine, the messages concerning the first virtual workflow and the second workflow.

Randell teaches these limitations (see figure 10, items 1010-1012; figure 12; column 12, lines 35-44; column 13, line 40 through column 14, line 2, teaching sending an information packet to an agent after another agent has completed a task, wherein the computer system is the third-party mediator; column 4, lines 13-27, disclosing different agents responsible for different tasks/workflows).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Randell with the workflow model of Flores. One of ordinary skill in the art would have been motivated to do so in order to dispatch a task to an agent in order to perform work (see Randell, column 12, lines 35-38).

As per claim 37, Flores discloses a mediator operable to mediate interactions between the first virtual workflow and the second workflow, the mediator comprising:

a database operable to store the first virtual workflow, the second workflow, instances of the first virtual workflow, and instances of the second workflow (see column 4, lines 53-64); and

a monitor operable to track execution states of the first virtual workflow and the second workflow (see column 8, line 45 through column 10, line 33; table 1, disclosing tracking the state of a task).

Flores does not explicitly disclose a security manager operable to receive messages regarding the first virtual workflow for decryption.

Randell teaches this limitation (see figure 10, items 1010-1012; figure 12; column 12, lines 35-44; column 13, line 40 through column 14, line 2, teaching sending an information packet to an agent after another agent has completed a task, wherein the computer system is the security manager).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Randell with the workflow model of Flores. One of ordinary skill in the art would have been motivated to do so in order to pass the message on and dispatch a task to an agent in order to perform work (see Randell, column 12, lines 35-38).

Additional Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. patent number 6,073,109 to Flores et al, directed to managing business processes using linked workflows

U.S. patent number 6,349,238 to Gabbita et al, directed to managing workflow among a variety of organizations within a telecommunications company

U.S. patent number 7,039,597 to Notani et al, directed to managing collaboration within and between enterprises

U.S. patent number 6,920,456 to Lee et al, directed to maintaining and updating workflow information stored in a database

U.S. patent number 6,052,684 to Du, directed to consistent execution of workflow processes in a workflow management system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil R. Kardos whose telephone number is (571) 270-3443. The examiner can normally be reached on Mon-Thu and alternating Fridays from 7:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dixon can be reached on (571) 272-6803. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas A Dixon/
Supervisory Patent Examiner, Art Unit 4172

Neil R. Kardos
Examiner
Art Unit 4172

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11/16/07